

**STATEMENT OF BASIS (AI No. 33785)**  
**PER20040002**

for draft Louisiana Pollutant Discharge Elimination System permit No. **LA0106321** to discharge to waters of the State of Louisiana.

**THE APPLICANT IS:** Sasol North America, Inc.  
Sasol Ethylene Underground Storage Facility  
2201 Old Spanish Trail  
Westlake, Louisiana 70669

**ISSUING OFFICE:** Louisiana Department of Environmental Quality (LDEQ)  
Office of Environmental Services  
Post Office Box 4313  
Baton Rouge, Louisiana 70821-4313

**PREPARED BY:** Lisa Kemp

**DATE PREPARED:** January 10, 2006; updated March 16, 2006

**1. PERMIT STATUS**

**A. Reason For Permit Action:**

Permit reissuance of an administratively continued Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term. This permit was initially issued to CONDEA Vista Company. According to a letter received by the LDEQ Office of Environmental Compliance September 20, 2001; effective September 1, 2001, the name CONDEA Vista Company was changed to SASOL North America, Inc. This name change reflected the Sasol Group's acquisition of CONDEA Vista Company. This change will be reflected in the permit reissuance.

**B. LPDES permit – in the name of CONDEA Vista**

LPDES permit effective date: December 1, 1999

LPDES permit expiration date: November 30, 2004

EPA has not retained enforcement authority.

**C. NPDES permit - N/A**

**D. LWDPS permit - N/A**

**E. Date Application Received:** June 10, 2004; additional information received via email  
March 6, 2006

**2. FACILITY INFORMATION**

**A. FACILITY TYPE/ACTIVITY - ethylene underground storage facility**

This facility consists of two ethylene exchanger units and a pond for non-contact cooling water, firewater, and stormwater runoff. The Firewater Pond is used to collect rain water. Water from the pond is also utilized to cycle non-contact cooling water through the two ethylene exchangers at approximately 500 gallons per minute. The water is discharged from the exchanger into one end of the ditch at a temperature of approximately 85 degrees Fahrenheit and water is withdrawn 200 feet away, at the other end and returned to

the exchanger. The non-contact cooling water is used to cool the ethylene in the transport pipe. The ethylene is transported by pipeline to other off-site facilities and an off-site underground storage dome. This pond does not empty into any of the area streams or rivers. During heavy rain events, however, the water from the Firewater Pond will overflow. The overflow direction is typically south onto property maintained by Sasol. On occasion, the overflow may flow beyond Sasol maintained property to Bayou Choupique via drainage ditches.

#### B. FEE RATE

1. Fee Rating Facility Type: minor
2. Complexity Type: I\*
3. Wastewater Type: III (most of the discharge is stormwater runoff)
4. SIC code: 5169, 4619

\* In Appendix A - Section IV (Relation of 1987 to 1977 Industries) of the Standard Industrial Classification Manual, the SIC code 5169 is equivalent to a previous SIC code of 5161. As per LAC33:IX.1319 Table I, SIC code 5161 is assigned Complexity Type II. The Complexity Type has been BPJ'd from II to I to match other similar facilities.

C. LOCATION - 2210 West Burton, in Sulphur, Calcasieu Parish  
Latitude 30°14' 23", Longitude 93°24' 40"

### 3. OUTFALL INFORMATION

#### Outfall 001

Discharge Type: overflow from the firewater, non-contact cooling water and stormwater pond  
Treatment: none  
Location: at the south end of the pond prior to combining with any other waters (Latitude 30°14' 23", Longitude 93°24' 40")  
Flow: intermittent  
Discharge Route: Bayou Choupique via drainage ditches

### 4. RECEIVING WATERS

STREAM - Bayou Choupique via drainage ditches

BASIN AND SEGMENT - Calcasieu River Basin, Segment 031001

DESIGNATED USES - a. primary contact recreation  
b. secondary contact recreation  
c. propagation of fish and wildlife

## 5. PROPOSED EFFLUENT LIMITS

BASIS - See Rationale, Page 6

## 6. COMPLIANCE HISTORY/COMMENTS

### A. Compliance History

1. WQMD - There are no open, appealed, or pending water enforcement actions as of January 9, 2006
2. Other Divisions - A Notice of Violation (No. RMPE-N-04-0022) was issued to this facility December 21, 2004 as a result of an Air Quality risk management plan program inspection

B. DMR Review/Excursions - No excursions noted during DMR file review of the last two years

C. Inspections - A water discharge permit compliance inspection June 4, 2003 revealed the following:

1. No flow at the time of inspection
2. facility very clean, orderly in appearance
3. DMR review of the past three years found no problems or exceedances

## 7. EXISTING EFFLUENT LIMITS

*Outfall 001 - the intermittent discharge of overflow from the firewater and non-contact cooling water pond and low contamination potential stormwater runoff*

<i>Pollutant</i>	<i>Monthly Average (mg/l) Unless Stated</i>	<i>Daily Maximum (mg/l) Unless Stated</i>	<i>Monitoring Frequency</i>
Flow - MGD	Report	Report	1/quarter
TOC	---	50	1/quarter
Oil and Grease	---	15	1/quarter
pH Minimum/Maximum Values (standard units)	6.0 (minimum)	9.0 (maximum)	1/quarter

## 8. ENDANGERED SPECIES

The receiving waterbody, Subsegment 031001 of the Calcasieu River Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 21, 2005 from Watson (FWS) to Gautreaux (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the

issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

## 9. HISTORIC SITES

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

## 10. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in the application.

## 11. 303(d)/ TMDL

Subsegment 031001, Bayou Choupique- Headwaters to Intracoastal Waterway (Estuarine), is not listed on LDEQ's Final 2004 303(d) List as impaired. However, subsegment 031001 was previously listed as impaired with organic enrichment/ low dissolved oxygen (DO), for which the TMDL listed below has been developed. The Department of Environmental Quality reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional TMDLs and/or water quality studies. The DEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDLs for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as necessary to achieve compliance with water quality standards.

The following TMDL has been established for subsegment 031001:

A TMDL report for Oxygen Demand, *TMDLs for Dissolved Oxygen for the Calcasieu Estuary* was completed on July 1, 2002. As per the TMDL, "Attainment of the DO criteria for the subsegments modeled in this study will require focused management of nonpoint sources." Therefore, the discharges from this facility should not cause or contribute to the violation of water quality standards for organic enrichment/ low DO. According to the TMDL, "The implementation of this TMDL through wastewater discharge permits and implementation of best management practices to control and reduce runoff of soil and oxygen-demanding pollutants from nonpoint sources in the watershed will also control and reduce the nutrient loading from those sources."

## **12. PUBLIC NOTICES**

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

## **13. STORM WATER POLLUTION PREVENTION PLAN (SWP3) REQUIREMENT**

As per LAC 33:IX.2341.B.14, stormwater discharges from facilities classified as SIC codes 5169 and 4619 are not considered to be associated with industrial activities. However, an SWP3 is included in the permit since there is a potential for stormwater contamination from processes including loading and unloading.

The SWP3 shall be prepared, implemented, and maintained within six (6) months of the effective date of the final permit. The plan should identify potential sources of storm water pollution and ensure the implementation of practices to prevent and reduce pollutants in storm water discharges associated with industrial activity at the facility (see narrative requirements for the AI).

### Rationale for Sasol North America, Inc.

1. **Outfall 001- the intermittent discharge of overflow from the firewater, non-contact cooling water, and stormwater pond (intermittent flow)**

<u>Pollutant</u>	<u>Limitation</u> Mo. Avg:Daily Max (mg/l)	<u>Reference</u>
Flow – MGD	Report : Report	LAC 33:IX.2707.I.1.b
TOC	--- : 50	previous permit; *
Oil and Grease	--- : 15	previous permit; *
pH -Allowable Range (standard units)	6.0 : 9.0 (min) : (max)	previous permit; *

**Treatment:** none

**Monitoring Frequency:** All parameters shall be monitored once per quarter based on the previous permit

**Limits Justification:** The majority of the Outfall 001 flow is due to stormwater runoff. Limits are based on the previous permit and current LDEQ stormwater guidance\*

- \* LDEQ's guidance on stormwater, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6)

**NOTE**

For outfalls containing concentration limits, the usage of concentration limits is based on BPJ for similar outfalls since the flow is variable and estimated.